AUTHOR INDEX

ABE, S., 992
ADCOCK, D., 1189
AHLUWALIA, B., 967
ALLEN, R. G., 685
AMANO, H., 509
AMBACH, W., 1173
ANDERSON, D., 953
ANTONINI, A., 1295
AOKI, M., 1284
ARCHER, V. E., 1311
ARTHUR III, W. J., 1012
AUMANN, D. C., 495

BARATTA, E. J., 731
BARRY, S. F., 304
BAXTER, J. F., 267
BECK, H. L., 1015
BEENTJES, L. B., 1267
BENEDETTO, A. R., 327, 330, 455, 1324
BERGER, C. D., 419
BERNHARD, S., 999
BIGU, J., 512
BIRATTARI, C., 919
BLACKBURN, P. B., 1314
BLANKENSTEIN, M. F., 685
BOELDT, E. J., 1306
BORAK, T. B., 267, 320
BORIO, R., 1295
BOYD, H. A., 587
BOYER, A. L., 1309
BOYKIN, A., 1189
BRAMLITT, E. T., 945
BRAMMER, T. W., 405
BREITENSTEIN, B. D., 565
BRODSKY, A., 321
BROSS, I. D., 535
BROYLES, A. A., 701
BUHEITEL, F., 495
BUIJS, W. C., 1267
BURKHARDT, J., 1165
BURNHAM, J. W., 405
BUSCHBOM, R. L., 1085

CADWELL, L. L., 11
CASH, B. L., 527
CATTARIN, S., 795
CHARALAMBOUS, STEF., 1193, 1311
CHARRON, D., 517
CHEN, M. S., 1312
CHEN, T.-C., 411
CHIOCCHINI, S., 1295
CHONG, C. S., 1008
CHONG, H. Y., 1008
CHU, R. Y. L., 317
CHU, W. K., 958
CLASSIC, K., 1270
CODELL, R. B., 713
COHEN, B. L., 239, 279, 318, 1053, 1290
COLL, P., 1139
CORSTENS, F. H., 1267
COSSAIRT, J. D., 907
COUCH, J. G., 907
CRISP, J., 1189

DAVIS, J. L., 259
DE PLANQUE, G., 1015
DIAGO, J. R., 1155
DOBRY, C. A., 958
DOGANIS, S., 1310
DONOVAN, G. L., 81
DORETTI, L., 795
DOSWELL, A. C., 771
DOUGHERTY, C., 825
DREXLER, G., 94, 897
DROULLARD, R. F., 267
DUCHEMIN, A. M., 84
DUNFORD, D. W., 211
DURBIN, P. W., 623, 1302

ECKERL, H., 897
EICHHOLZ, G. G., 115, 326, 328, 539, 540, 1319, 1320, 1322
EISELE, G. R., 1276
ELDRIDGE, J. S., 777
ELWYN, A. J., 907
ENGELHARDT, S., 1306
ERICKSON, B. H., 1276
ESPOSTI, P. D., 1295
ESSIEN, I. O., 503
EUTSLER, B. C., 587

FALESCHINI, H., 495
FISENNE, I. M., 1272
FJELD, R. A., 100
FLEISCHER, R. L., 65
FREEMAN, W. S., 907
FRIEDMANN, L., 495
FUN, H. K., 1008

GARCIA, V. S., 1155
GAUTIER, M. A., 970
GELS, G. L., 805
GILMORE, R., 953
GOLDIN, A. S., 1017
GÓMEZ, S., 1012
GROSS, G., 1270

HAM, G. J., 304
HAMADA, N., 290
HANKINS, D. E., 435
HARRIS, C. R., 455
HARRISON, R. F., 685
HARTMAN, R., 953
HASAN, F., 1193
HATTORI, T., 992
HEID, K. R., 569
HENRIKSEN, T., 1314
HENRY, H. F., 539
HENRY, W. H., 1309
HESS, C. T., 65
HICKEY, R. J., 536, 949, 1013
HODGSON, A., 499
HOLTZMAN, R. B., 1011
HOLUB, R. F., 267, 320
HU, S. J., 1003

IBA, H., 479
IDE, H. M., 970
IGARASHI, Y., 707
IIDA, T., 992
IKEBE, Y., 992
IKEDA, N., 707
INKRET, W. C., 267
ISRAELI, M., 1069

JAAKKOLA, T., 296
JACKSON, T. P., 49
JAIN, V. K., 1261
JANECZEK, J., 1197
JANKOWSKI, J., 94
JANTUNEN, M., 1251
JASIŃSKA, M., 491
JELINEK, C. F., 731
JOHN, G., 977

JOHNSON, J. R., 211, 996
JOHNSON, T. E., 304
JONES, C. W., 405

KANDAIYA, S., 1003
KARGAČIN, B., 859
KASAI, A., 509
KATHREN, R. L., 1314
KENNEDY JR., W. E., 11
KENNY, P. J., 1312
KHAN, A., 443, 853, 986
KITIS, G., 1193
KOBAYASHI, Y., 88
KOEHLER, H., 1165
KOSTIAL, K., 859
KOURIS, K., 1147
KRAITOR, S. N., 1313
KUMAMOTO, Y., 37
KUNZ, C., 25, 522
KURODA, P. K., 503
KUSHNERYOVA, K. K., 1313

LARIVIERE, P. D., 962, 1105
LANE, B. H., 419
LANG, C. M., 791
LANGHORST, S. M., 84
LANGRILL, L. N., 1309
LEGAC, J. A., 999
LECUYER, D. W., 693
LEGGETT, R. W., 1115, 1299
LEONG, L. S., 1008
LEVY, C. K., 1217
LINSLEY, G. S., 1280
LLOYD, R. D., 405
LODDE, G., 55
LYON, T. L., 221

MAEDA, J., 992
MAILLIE, H. D., 425
MARAZIOTIS, E. A., 302
MARHA, K., 517
MARKHAM, O. D., 1012
MARTIN JR., J. A., 287
MASSE, R., 1302
MATSUNAGA, T., 509
MAYS, C. W., 405
MAZZI, U., 795
MCELROY, N. L., 1321
MCGEE, M. K., 1097
MCINROY, J. F., 587
MCKENZIE, D. H., 11
MCLEOD, K. W., 1280
MCNAMEE, J. E., 1189
MCNEILL, K. G., 825
MECK, R. A., 1312
MELLOR, R. A., 982
METIVIER, H., 1302
MICHALAK, J., 1097
MIKLOS, J., 873
MILLER, K. L., 791
MINATO, S., 992
MOMENI, M. H., 310
MOODY, J. C., 499
MOORE, M. M., 81
MORIMOTO, D. C., 1217
MORSE, J. G., 267
MOSS, W. D., 970
MUC, A. M., 677
MÜLLEN, G., 495
MURAI, I., 1205
MUSSALO-RAUHAMAA, H., 296
MUSTAFA, A. A., 1147, 1197
MUSTONEN, R., 1251

NEFF, R. D., 455
NEWTON, C. E., 565
NIE, Y. F., 100
NISHIKAWA, T., 1284
NISHIZAWA, K., 88, 290
NORDLUND, G., 1239
NORRIS, H. T., 565
NORTH, D., 92

OAKES, T. W., 777
OGAWA, H., 992
OGUNLEYE, O. T., 527, 937
OKABE, S., 1284
OVERCAMP, T. J., 100
OZAWA, Y., 1205

PALIWAL, B. R., 937
PALMER, H. E., 577, 1085
PANKOW, B. G., 1097
PANTELIAS, G. E., 425
PAPA, V., 1295
PAPASTEFANOU, C., 1311
PARTANEN, J. P., 1239
PERRY, P. M., 1272
PETER-WITT, E., 395
PETERSON, K. R., 522
PHILLIPS, C. R., 443, 853, 986
PILTINGSRUD, H. V., 805
PINDER III, J. E., 771, 1280
PLATO, P., 873
POHL, E., 1229
POLLOCK, R. W., 533
POPPLEWELL, D. S., 304
PORTER JR., S. W., 55
POSTON, J. W., 1319
PRUITT, D., 953
PUROHIT, R. G., 1261

RAES, F., 1177
RAYMOND, K. N., 1302
REHWALD, W., 1173
RICHMOND, C. R., 1015
RICHMOND, R. G., 527
RIEKSTS, G. A., 577, 1085
ROBINSON, B., 569
RODRIGUEZ, D. J., 522
ROMERO, D., 587
ROPE, S. K., 247
ROSSI, J., 1239

SABOL, J., 1197
SADAYUKI, S., 290
SALOMONE, A., 919
SANDOVAL, D.-N., 503
SANGSTER, W., 958
SAVOLAINEN, I., 1239
SAWAMURA, T., 1205
SCHERY, S. D., 1061
SCHLAPPER, G. A., 117, 327, 1018, 1019, 1021, 1023, 1324, 1325, 1326
SCHMIDT, C. T., 623
SCHWABENTHAN, J., 491
SCOTT, A. G., 319
SEKI, R., 707
SEQUIN, H., 999
SHAPIRO, C. S., 701
SHEARER, D. R., 81
SHEPPARD, M. I., 106
SHERBINI, S., 55
SHIMO, M., 992
SIMMONDS, J. R., 1280
SLINEY, D. H., 677
SPATE, V. L., 84
SPIERS, E. W., 115, 116, 325, 1019, 1020, 1317, 1318, 1327
SPITZ, H. B., 577, 1085
STANFORD, N., 982
STATHER, J. W., 499

STEINHÄUSLER, F., 1229
STRADLING, G. N., 499
STRAUME, T., 883
STROUBE JR., W. B., 731
STUCHLY, M. A., 693
SUBBARATNAM, T., 1261
SUMNER, S. A., 499
SUTHERLAND, J. K., 315
SWANSON, S. M., 747
SWANSON, W. P., 94
SWINT, M. J., 1314
SYKES III, J., 55

TAMARIN, R. H., 1217
TANIDA, H., 1205
TAYLOR, L. S., 1043
THIND, K. S., 227
THOMAS, D. C., 825
THOMAS, R. H., 325, 1021, 1318
THOMAS, S. J., 685
THOMASZ, E., 897
TSAKIRI, M., 1193
TSOULFANIDIS, N., 1323
TSOULFANIDIS, N., 329, 1323
TURNER, L. G., 65

UDA, T., 479
UZUNOV, I., 1229

VALKAMA, I., 1239
VELEKE, L., 1306
VETTER, R. J., 1270
VOLF, V., 395, 865
VOSHELL JR., J. R., 777

WAHLEN, M., 522
WALIGÓRSKI, M. P. R., 491
WALSH, M. L., 316
WATSON JR., J. E., 7
WEIDNER, W. A., 791
WENG, P.-S., 411
WERNLI, C., 980
WETHINGTON JR., J. A., 1321
WHICKER, F. W., 247
WHITE, W. J., 791
WHITTLESTONE, S., 847
WIATROWSKI, W., 1013
WILLIAMS, G., 94
WIRTH, E., 1165
WIRTH, R., 865
WOLBARSHT, M. L., 677
WOLFE, J. A., 113

YAMAKAWA, A., 707

ZACH, R., 737
ZELAC, R. E., 324
ZETTWOOG, P. R., 999
ZUCLICH, J. A., 685

SUBJECT INDEX
Volume 49, Numbers 1-6

Accelerators
Checking an instrument response at 2.75-MeV photon energy, a simple method for 980
High-energy proton, radiation measurements in a labyrinth penetration at a 907
Neutron spectrum measurements at a 40-MeV proton cyclotron 919
Accelerators, medical
Directional response of the Andersson-Braun rem meter in a medical accelerator treatment room 962
High thermoluminescent dosimeter readings outside of 533
High-energy electron, radiotherapy technologist dose from 1105
Accident analysis
Dose measurement following a radiation accident, use of radiation-induced, long-lived free radicals for, comments on 1313
Accidents, power reactor
Airborne radionuclides released by a reactor accident, doses due to, effects of changing dispersion conditions during long-range transport 1239
Give KI promptly, in accidents 1311
Release, continuous, ground-level; approximate method for estimating the short-term centerline gamma absorbed dose due to 100
Releases from nuclear plants, potential contamination of surface water supplies by 713
Thyroid uptake of ^{131}I, skin exposure to I blocks 791
Accidents, transport
Sinking of ships with U cargo, hazards from 318
Agriculture
Corn plants, retention of ^{238}Pu-bearing particles by 771
Americium
Analysis of, in urine, rapid screening methods for 970
Americium-241
Americium-241 content of a whole body. Part I. Introduction and history of the case 565
Americium-241 content of a whole body. Part II. Estimate of the initial systemic burden 569
Americium-241 content of a whole body. Part III. Gamma-ray measurements 577
Americium-241 content of a whole body. Part IV. Preparation and analysis of the tissues and bones 587
Americium-241 content of a whole body. Part V. Implications for metabolic modelling 623
Gonadal retention and localization of, in orally exposed swine 1276
Annual limit of intake
Annual limit of intake, unique method of determining ^{3}H intakes as a fraction of 1261

Bioassay
Systemic Pu, model of the retention, translocation and excretion of 1115
Bones, human
Americium-241 content of a whole body. Part II. Estimate of the initial systemic burden 569
Americium-241 content of a whole body. Part III. Gamma-ray measurements 577
Americium-241 content of a whole body. Part IV. Preparation and analysis of the tissues and bones 587
Systemic Pu, model of the retention, translocation and excretion of 1115

Ca-DTPA
Comparison with Zn-DTPA, in removing ^{234}Th from the rat 395

SUBJECT INDEX

Calibration
Checking an instrument response at 2.75-MeV photon energy, a simple method for 980
Dose calibrator linearity--a regulatory requirement 967
Canada
Abstracts of papers presented at the Fifth Annual Conference of the Canadian Radiation Protection Association, 1-3 May 1984 365
Northern Saskatchewan aquatic system, food-chain transfer of U-series radionuclides in 747
Performance of a passive electret dosimeter for Rn progeny 986
Ventilation, relative effect of, on the potential alpha energy from ^{222}Rn and ^{220}Rn progeny 996
Cancer
Lung cancer risks, estimates of lifetime, from Rn progeny exposure 825
Carbon-11
Dosimetry of external radiation exposure for and calculation of maximum permissible concentration values for airborne materials containing 805
Carbon-14
Discharge at three light-water reactors 25
Carcinogenesis
Effects of Prenatal Irradiation with Special Emphasis on Late Effects. Proceedings of a Symposium of the European Late Effects Project Group at Bordeaux, France, 29 July 1982, edited by C. Streffer and G. Patrick (book review) 330
Neutron radiation, radiobiological basis for setting safety standards 883
Cerium-141
Calcium alginate, ferrihexacyanoferrate(II), KI and Zn-DTPA, simultaneous oral administration of, for reducing ^{85}Sr, ^{137}Cs, ^{131}I and ^{141}Ce retention in rats 859
Cesium-137
Calcium alginate, ferrihexacyanoferrate(II), KI and Zn-DTPA, simultaneous oral administration of, for reducing ^{85}Sr, ^{137}Cs, ^{131}I and ^{141}Ce retention in rats 859
Depth doses in the ICRU sphere using ^{137}Cs, comparison of experimental and theoretical 94
High-resolution, room temperature Si detector for use in clinical health physics, evaluation of 953
Radionuclides in foods, survey of, 1978-1982 731
Transfer of, in a waste retention pond with emphasis on aquatic insects 777
Charcoal filters
Charcoal cartridges used for airborne radioiodine collection, detection of ^{60}Co in 982
Chelation
Analysis of Pu or Am in urine, rapid screening methods for 970
Ca-DTPA and Zn-DTPA, comparison of, in removing ^{234}Th from the rat 395
Calcium alginate, ferrihexacyanoferrate(II), KI and Zn-DTPA, simultaneous oral administration of, for reducing ^{85}Sr, ^{137}Cs, ^{131}I and ^{141}Ce retention in rats 859
Decorporation and metabolism of Pu after inhalation of the tributyl phosphate complex by the rat 499
Promotion by tetrameric catechoylamide ligands and $CaNa_3$-DTPA of the dissociation *in vitro* of the Pu-transferrin complex formed after intravenous injection of Pu-tri-N-butylphosphate 1302
Zn-DTPA therapy, effect on maternal transfer of ^{241}Am or ^{237}Pu to young mice 405

Chromosome abberration
Damage, radiation-induced, in rodent primary cells using premature chromosome condensation 425
Irradiation, time-dependent, biological repair with 701
Cigarettes
Plutonium-239, ^{240}Pu and ^{210}Po contents of tobacco and cigarette smoke 296
Risks associated with exposure to radiation: science, pseudoscience and opinion 949
Cobalt-60
Detection of, in charcoal cartridges used for airborne radioiodine collection 982
Gamma rays in air, energy and angular distribution of 310
Transfer of, in a waste retention pond with emphasis on aquatic insects 777
Computed tomography
Basic Principles of Computed Tomography by Carlisle Lee Morgan (book review) 1019
Technology of Nuclear Magnetic Resonance, edited by P.D. Esser and R.E. Johnston (book review) 1020
Computer calculations
Computed Electron Beam Dose Planning (Acta Radiologica, Supplementum 36R), edited by Anders Brahme (book review) 116
Dose calculations from routine releases, a new approach of influence area division 1155
Monitoring system, digital, for a radioisotope laboratory using a personal computer 88
Contamination
'Radiocontamination in medical centers from diagnostic nuclear medicine procedures,' comment on 1012
Reply to comment on 'Radiocontamination in medical centers...' 1013
Contamination, environmental
Of surface water supplies by atmospheric releases from nuclear plants 713
Contamination, external
Retention of ^{238}Pu-bearing particles by corn plants 771
Contamination, internal
Adult human thyroid weight 1097
Americium-241 content of a whole body. Part I. Introduction and history of the case 565
Americium-241 content of a whole body. Part II. Estimate of the initial systemic burden 569
Americium-241 content of a whole body. Part III. Gamma-ray measurements 577
Americium-241 content of a whole body. Part IV. Preparation and analysis of the tissues and bones 587
Americium-241 content of a whole body. Part V. Implications for metabolic modelling 623
Biometric estimation of chest wall thickness of females 419
Determination of ^{99}Tc in urine by liquid scintillation counting to evaluate 795
Excretion of ^{35}S from two workers 84
From therapeutic ^{131}I capsules 81
Gamma-emitting radionuclides in captive meadow voles (Microtus pennsylvanicus), whole-body biological elimination rates of 1217
Monitoring, in-vitro, of salivary ^{125}I 290
Promotion by tetrameric catechoylamide ligands and $CaNa_3$-DTPA of the dissociation in vitro of the Pu-transferrin complex formed after intravenous injection of Pu-tri-N-butylphosphate 1302
Systemic Pu, model of the retention, translocation and excretion of 111

Correction factors
Comments on 'Correction factors for survey meter calibrations' 1309
Element correction factors for thermoluminescent dosimeters, production of 873
Reply to comments on 'Correction factors for survey meter calibrations' 1309

Detector, etched track
Efficiency estimation for detecting U alpha particles in solid-state 479
Field and laboratory tests of, summer-vs-winter variations of ^{222}Rn and tightness effects in Maine houses 65

Detector, scintillation
Detector, high-sensitivity Rn, incorporating a particle generator 847
Miniaturization of High-Energy Physics Detectors, edited by A. Stefanini (book review) 1319

Detector, silicon
Miniaturization of High-Energy Physics Detectors, edited by A. Stefanini (book review) 1319

DNA
Irradiation, time-dependent, biological repair with 701

Dose distribution
Depth doses in the ICRU sphere using ^{137}Cs, comparison of experimental and theoretical 94

Dose equivalent
Determination of Dose Equivalents Resulting from External Radiation Sources (ICRU Report No. 39) (book review) 1324
Experimental determination of conversion factors between organ doses and measured quantities for external photon irradiation 897

Dose, absorbed
Absorption, gastrointestinal, of Np in rats 865
Dose measurement following a radiation accident, use of radiation-induced, long-lived free radicals for, comments on 1313
Dose to radiotherapy technologist from high-energy electron medical accelerators 1105
Method, approximate, for estimating the short-term centerline gamma absorbed dose due to a continuous, ground-level release 10
Personnel or parents accompanying children in a radiodiagnostic pediatric department, evaluation of dose absorbed by 1295
Radiation measurements in a labyrinth penetration at a high-energy proton accelerator 907
Radionuclide solutions mixed intimately with the FBX dosimeter, measurement of absorbed dose from 455

Dose, collective
Doses due to airborne radionuclides released by a reactor accident, effects of changing dispersion conditions during long-range transport 1239

Dose, low
Dosimetry, influence of regenerated thermoluminescence on 1193

Doses, organ
Experimental determination of conversion factors between organ doses and measured quantities for external photon irradiation 897

Dosimetry
Doses in moving radiation fields, aspects relating to the calculation of 1139
Dosimeter, digital albedo neutron, use of computer memory chips as the basis for 259
Effect of air-scattered gamma particles on instrument and dosimeter response 435
Energy and angular distribution of ^{60}Co gamma rays in air 310
Modification, proposed, of the cavity theory for electrons 937
Radon progeny dosimeters, application of electrets to 853

Dosimetry, alpha
Passive electret dosimeter for, performance of 986
Dosimetry, chemical
Radionuclide solutions mixed intimately with the FBX dosimeter, measurement of absorbed dose from 455
Dosimetry, external
Of radiation exposure for and calculation of maximum permissible concentration values for airborne materials containing 805
Dosimetry, gamma
Doses in moving radiation fields, aspects relating to the calculation of 1139
Dosimetry, internal
ICRP and MIRD models for Fe metabolism in man, comparison of 211
In-vivo measurements, new method for analyzing high-resolution spectra from 1085
Dosimetry, micro-
Microdosimetry (ICRU Report 36) (book review) 1023
Radiation Protection--8th Symposium on Microdosimetry (proceedings of a conference held at Tulich, Federal Republic of Germany, 27 September--1 October 1982) (book review) 1323
Dosimetry, personnel
Beta dosimetry using multi-element thermoluminescent dosimeters, experimental evaluation of a method for performing 55
Direct-reading dosimeters, optimizing the performance of 49
Element correction factors for thermoluminescent dosimeters, production of 873
Guidelines for issuing dosimeters 317
Low dose measurements, use of sintered magnesium borate thermoluminescent dosimeters for 527
Dosimetry, thermoluminescent
Comments on the paper 'Measurement of the effective dose equivalent in a nuclear reactor environment with a personal thermoluminescent dosimeter 315
Element correction factors for, production of 873
Low dose measurements, use of sintered magnesium borate dosimeters for 527
Multi-element dosimeters, experimental evaluation of a method for performing personnel beta dosimetry 55
Readings outside a medical accelerator 533
Regenerated thermoluminescence, influence of, on low-dose dosimetry 1193
Reply to Sutherland 316
DTPA
Analysis of Pu or Am in urine, rapid screening methods for 970
Promotion by tetrameric catechoylamide ligands and $CaNa_3$-DTPA of the dissociation in vitro of the Pu-transferrin complex formed after intravenous injection of Pu-tri-N-butylphosphate 1302

Electromagnetic fields
Induction heating and operator exposure to 693
Electron-spin resonance
Magnetic Resonance in Medicine and Biology by M.A. Foster (book review) 1327
Electrons
Modification, proposed, of the cavity theory for 937
Radiation Dosimetry: Electron Beams with Energies Between 1 and 50 MeV (ICRU Report No. 35) (book review) 1021
Stopping Powers for Electrons and Positrons (ICRU Report No. 37) (book review) 1019
Emergency planning
In accidents, give KI promptly 1311
Potassium iodide: predistribution or not? 287

Emergency planning (continued)
Release, continuous, ground-level; approximate method for estimating the short-term centerline gamma absorbed dose due to 100
Releases, atmospheric, from nuclear plants, potential contamination of surface water supplies by 713
Thyroid uptake of ^{131}I, skin exposure to I blocks 791
Emissions, atmospheric
Airborne radioiodine collection, detection of ^{60}Co in charcoal cartridges used for 982
Airborne radionuclides released by a reactor accident, doses due to, effects of changing dispersion conditions during long-range transport 1239
Fly-ash emissions, radioactivity of size fractionated, from a peat- and oil-fired power plant 1251
Radioactivity in the Environment: Sources, Distribution and Surveillance by Ronald L. Kathren (book review) 115
Releases from nuclear plants, potential contamination of surface water supplies by 713
Retention of ^{238}Pu-bearing particles by corn plants 771
Epidemiology
Evaluation of Occupational and Environmental Exposures to Radon and Radon Daughters in the United States (NCRP Report No. 78) (book review) 329
Radiation, low-level, malignant disease, extrapolation and 'official science' 536
Excess leukemia among nuclear submarine workers at Portsmouth Naval Shipyard 535
Errata
"Interim guidelines on limits of human exposure to airborne ultrasound," correction for 1025
"Models of tritium excretion following prolonged occupational exposure," correction for 1027
Excretion
Americium-241 content of a whole body. Part V. Implications for metabolic modelling 623
Excretion, urinary
Analysis of Pu or Am in urine, rapid screening methods for 970
Determination of ^{99}Tc in urine by liquid scintillation counting to evaluate internal contamination 795
Sulfur-35 excretion from two contaminated workers 84
Exposure, occupational
Americium-241 content of a whole body. Part I. Introduction and history of the case 565
Americium-241 content of a whole body. Part II. Estimate of the initial systemic burden 569
Americium-241 content of a whole body. Part III. Gamma-ray measurements 577
Americium-241 content of a whole body. Part IV. Preparation and analysis of the tissues and bones 587
Americium-241 content of a whole body. Part V. Implications for metabolic modelling 623
Analysis of Pu or Am in urine, rapid screening methods for 970
Estimates of lifetime lung cancer risks resulting from Rn progeny 825
Evaluation of Occupational and Environmental Exposures to Radon and Radon Daughters in the United States (NCRP Report No. 78) (book review) 329
In Taiwan, 1962-1983 411
In-vivo measurements, new method for analyzing high-resolution spectra from 1085
Laser radiation of wavelengths between 180 nm and 1 mm, international guidelines on limits of exposure 341

Exposure, occupational (continued)
Lasers, safety with 113
Limits of exposure to wavelengths between 180 nm and 400 nm (incoherent optical radiation), international guidelines on 331
Manhattan District workers, Pu deposition in, a retrospective look 1314
"Models of tritium excretion following prolonged occupational exposure," correction for 1027
Nuclear submarine workers at Portsmouth Naval Shipyard had excess leukemia, confirm or deny 535
Operator exposure to electromagnetic fields, and induction heating 693
Radiation doses to commercial aviation crewmembers 945
Radiation, low-level, malignant disease, extrapolation and 'official science' 536
Radiodiagnostic pediatric department, evaluation of dose absorbed by personnel or parents accompanying children in 1295
Radiographs, portable, pattern of scattered exposure from 92
Radiotherapy technologist dose from high-energy electron medical accelerators 1105
Radium-226 and ^{232}Th concentration in amang 1003
To Rn in non-uranium mines in the European community 999
Video display terminals, distribution of a pulsed very low frequency electric field around 517

Exposure, radiation
Conventional and rare-earth screen/film systems, comparison of exposures between 958
Dosimetry of external radiation exposure for and calculation of maximum permissible concentration values for airborne materials containing 805
Irradiation, time-dependent, biological repair with 701
Radiological protection concept for the general population, main inconsequences in 1229
Skin exposure to I blocks thyroid uptake of ^{131}I 791

Fallout
Contamination of firn layers by radioactive fission products from atmospheric 1173
Plutonium fallout at Fayetteville, Arkansas 503

Fish, freshwater
Aquatic system, northern Saskatchewan, food-chain transfer in 747
Trout, Ra accumulation in, assessment of radiation dose to man 247

Fish, salt-water
Marine organisms, bioaccumulation factors in 1290

Fluorine-18
Dosimetry of external radiation exposure for and calculation of maximum permissible concentration values for airborne materials containing 805

Fly ash
Gamma activity of, from a Greek power plant, properties of fly-ash cement 302

Gastrointestinal tract
Swine, orally exposed, gonadal retention and localization of ^{241}Am in 1276

Genetic effects, radiation
Irradiation, time-dependent, biological repair with 701

Germany, Federal Republic of
Iodine-129 in mammalian thyroids in 495

Gonads
Retention and localization of ^{241}Am in orally exposed swine 1276

Greece
Gamma activity of the fly ash from a Greek power plant and properties of fly-ash cement 302

Health effects
Biological Effects of Ultrasound: Mechanisms and Clinical Implications (NCRP Report No. 74) (book review) 328
Disease, malignant, low-level radiation, extrapolation and 'official science' 536
Effects of Prenatal Irradiation with Special Emphasis on Late Effects. Proceedings of a Symposium of the European Late Effects Project Group at Bordeaux, France, 29 July 1982, edited by C. Streffer and G. Patrick (book review) 330
Excess deaths, loss of life expectancy and population doses from, mass chest x-ray examinations in Japan--1980 37
Excess leukemia among nuclear submarine workers at Portsmouth Naval Shipyard 535
Immunity, non-specific, radiation protective effect of bacterial endotoxins 1013
Ocular effects of pulsed Nd laser radiation: variation of threshold with pulsewidth 685
Risks associated with exposure to radiation: science, pseudoscience and opinion 949
Health Physics Society
Abstracts for the 30th Annual Meeting of the Health Physics Society 119
President's Message--1985 7
Hiroshima
Neutron radiation, radiobiological basis for setting safety standards 883
History of physics
Cambridge Physics in the Thirties, edited by John Hendry (book review) 1321
Retrospective look, Pu deposition in Manhattan District workers 1314
The Demon in the Aether. The Life of James Clerk Maxwell by Martin Goldman (book review) 1021
The Nobel Prize by Peter Wilhelm (book review) 325
Hormesis
Nuclear submarine workers at Portsmouth Naval Shipyard had excess leukemia 535
Radiation, low-level, malignant disease, extrapolation and 'official science' 536
Radiation protective effect of bacterial endotoxins: non-specific immunity 1013
Risks associated with exposure to radiation: science, pseudoscience and opinion 949

ICRP Publication 23
Revision of, by Task Group on Reference Man 1015
Imaging
Magnetic Resonance in Medicine and Biology by M.A. Foster (book review) 1327
Technology of Nuclear Magnetic Resonance, edited by P.D. Esser and R.E. Johnston (book review) 1020
Incineration
Incineration of animals, solubility of radionuclides in ash from 1270
Ingestion
Absorption, gastrointestinal, of Np in rats 865
Americium-241 content of a whole body. Part II. Estimate of the initial systemic burden 569
Human ingestion dose, contribution of inhalation by food animals to 737
Radionuclides, probabilities for human intake, implications for nuclear waste disposal 321
Transport of elements from soil to human diet: an alternative approach to pathway analysis 239

Inhalation
Americium-241 content of a whole body. Part II. Estimate of the initial systemic burden 569
By food animals, contribution to human ingestion dose 737
In-vivo measurements, new method for analyzing high-resolution spectra from 1085
Of the tributyl phosphate complex by the rat, metabolism and decorporation of Pu after 499
Insects
Aquatic, transfer of ^{137}Cs and ^{60}Co in a waste retention pond with emphasis on 777
Intake
Annual limit of intake, unique method of determining ^{3}H intakes as a fraction of 1261
Tritium intake, as a fraction of the annual limit of intake, unique method of determining 707
Iodine
Adult human thyroid weight 1097
Give KI promptly, in accidents 1311
Skin exposure blocks thyroid uptake of ^{131}I 791
Iodine-125
High-resolution, room temperature Si detector for use in clinical health physics, evaluation of 953
Salivary, in-vitro monitoring of 290
Iodine-127
In mammalian thyroids in the Federal Republic of Germany 495
Iodine-129
In mammalian thyroids in the Federal Republic of Germany 495
Origin of I in soil and the ^{129}I problem 279
Iodine-131
Airborne radioiodine collection, detection of ^{60}Co in charcoal cartridges used for 982
Calcium alginate, ferrihexacyanoferrate(II), KI and Zn-DTPA, simultaneous oral administration of, for reducing ^{85}Sr, ^{137}Cs, ^{131}I and ^{141}Ce retention in rats 859
Skin exposure to I blocks thyroid uptake of 791
Therapeutic capsules, contamination from 81
Iron
Metabolism in man, comparison of the ICRP and MIRD models 211

Japan
Abstracts of papers presented at the 19th Annual Meeting of the Japan Health Physics Society, 21-11 June 1984 375
Mass chest x-ray examinations in, population doses, excess deaths and loss of life expectancy from, in 1980 37

Labyrinths
Radiation measurements in a labyrinth penetration at a high-energy proton accelerator 907
Lasers
Effects, ocular, of pulsed Nd laser radiation, variation of threshold with pulsewidth 685
Hazard analysis technique for multiple wavelength 221
Radiation from, of wavelengths between 180 nm and 1 mm, international guidelines on limits of exposure to 341
Safety with 113

Lead-210
Comments on ^{210}Pb and ^{210}Po in the environment 1011
Uranium-series radionuclides, food-chain transfer in a northern Saskatchewan aquatic system 747
Lead-212
Airborne, measurements of, at varied indoor locations within the United States 1061
Liquid scintillation
Determination of ^{99}Tc in urine by liquid scintillation counting to evaluate internal contamination 795

Magnetic resonance
Magnetic Resonance in Medicine and Biology by M.A. Foster (book review) 1327
Technology of Nuclear Magnetic Resonance, edited by P.D. Esser and R.E. Johnston (book review) 1020
Maine
Measurement of summer-vs-winter variations and tightness effects in houses, field and laboratory tests of etched track detectors for 65
Malaysia
Radioactivity level, gamma, in Sn slag dumps 1008
Radium-226 and ^{232}Th concentration in amang 1003
Metabolism
Iron in man, comparison of the ICRP and MIRD models 211
Microdosimetry
Microdosimetry (ICRU Report 36) (book review) 1023
Radiation Protection--8th Symposium on Microdosimetry (proceedings of a conference held at Tulich, Federal Republic of Germany, 27 September--1 October 1982) (book review) 1323
Microwave
Differing radiofrequency standards in the microwave region--implications for future research. Editorial. 677
Mining
Occupational exposure to Rn in non-uranium mines in the European community 999
Ventilation, relative effect of, on the potential alpha energy from ^{222}Rn and ^{220}Rn progeny 996
Models
Americium-241 content of a whole body. Part II. Estimate of the initial systemic burden 569
Americium-241 content of a whole body. Part V. Implications for metabolic modelling 623
Effects of changing dispersion conditions during long-range transport of airborne radionuclides released by a reactor accident, radiation dose due to 1239
Method, approximate, for estimating the short-term centerline gamma absorbed dose due to a continuous, ground-level release 100
Models, ICRP and MIRD, for Fe metabolism in man, comparison of 211
Of retention, translocation and excretion of systemic Pu 1115
Transfer coefficients used for stochastic calculations in radioecology, suitability of 1165
Monitoring, environmental
Airborne radioiodine collection, detection of ^{60}Co in charcoal cartridges used for 982
Concentrations measured in an energy-efficient house equipped with a heat exchanger 267
Determination of Dose Equivalents Resulting from External Radiation Sources (ICRU Report No. 39) (book review) 1324
Digital system for a radioisotope laboratory using a personal computer 88

Monitoring, environmental (continued)
Measurement, simultaneous, of Rn and its progeny in cave air by liquid scintillation techniques and alpha-ray spectrometry 509
Radioactivity in the Environment: Sources, Distribution and Surveillance by Ronald L. Kathren (book review) 115
Radon concentrations and f values in the natural environment, evaluation by alpha track detectors of 992
Radon progeny in houses, deposition rates of 1069
Retention of ^{238}Pu-bearing particles by corn plants 771
Monitoring, personnel
Contamination from therapeutic ^{131}I capsules 81
Contaminated workers, excretion of ^{35}S from 84
Determination of Dose Equivalents Resulting from External Radiation Sources (ICRU Report No. 39) (book review) 1324
In-vitro, of salivary ^{125}I 290
In-vivo measurements, new method for analyzing high-resolution spectra from 1085
Radiotherapy technologist dose from high-energy electron medical accelerators 1105

Nagasaki
Neutron radiation, radiobiological basis for setting safety standards 883
Neodymium
Pulsed Nd laser radiation, ocular effects of, variation of threshold with pulsewidth 685
Neptunium
Absorption of, gastrointestinal, in rats 865
Neutron activation
Neutron spectrum measurements at a 40-MeV proton cyclotron 919
Neutrons
Dosimeter, digital albedo neutron, use of computer memory chips as the basis for 259
Neutron radiation, radiobiological basis for setting safety standards 883
Radiation Protection and Measurement for Low-Voltage Neutron Generators (NCRP Report No. 72) (book review) 1018
Nitrogen-13
Dosimetry of external radiation exposure for and calculation of maximum permissible concentration values for airborne materials containing 805
Nuclear medicine
Biological Effects of Ultrasound: Mechanisms and Clinical Implications (NCRP Report No. 74) (book review) 328
Chromatography of Technetium-99m Radiopharmaceuticals--A Practical Guide by Philip J. Robbins (book review) 115
Clinical health physics, evaluation of a high-resolution room temperature Si detector for use in 953
Comment on 'Radiocontamination in medical centers from diagnostic nuclear medicine procedures' 1012
Control in Diagnostic Imaging. A Quality Control Cookbook by Joel E. Gray et al. (book review) 327
Criteria and Methods for Quality Assurance in Medical X-ray Diagnosis (British Journal of Radiology Supplement No. 18), edited by G. Drexler et al. (book review) 1324
Dose calibrator linearity--a regulatory requirement 967
MIRD and ICRP models for Fe metabolism in man, comparison of 211
Monitoring system, digital, for a radioisotope laboratory using a personal computer 88
Radiodiagnostic pediatric department, evaluation of dose absorbed by personnel or parents accompanying children in 1295

Nuclear medicine (continued)
Radiologic Science for Technologists (3rd Edn) by Stewart C. Bushong (book review) 117
Radiological protection concept for the general population, main inconsequences in 1229
Reply to comments on radiocontamination in medical centers 1013
Nuclear reactor fuel
Fuel pellets, natural UO_2, measurement of gamma radiation exposure rates from 227
Nuclear workers
Radiation, low-level, malignant disease, extrapolation and 'official science' 536
Submarine workers at Portsmouth Naval Shipyard had excess leukemia, confirm or deny 535
Nutrition pathway
Food-chain transfer of U-series radionuclides in a northern Saskatchewan aquatic system 747
Human ingestion dose, contribution of inhalation by food animals to 737
Marine organisms, bioaccumulation factors in 1290
Radioecology, suitability of transfer coefficients used for stochastic calculations in 1165
Radionuclides in foods, survey of, 1978-1982 731

Oxygen-15
Dosimetry of external radiation exposure for and calculation of maximum permissible concentration values for airborne materials containing 805

Pediatrics
Radiodiagnostic pediatric department, evaluation of dose absorbed by personnel or parents accompanying children in 1295
Peer review
Comments on the Health Physics review process 1011
Pennsylvania
Pittsburgh area homes, Rn levels in, survey of one-year averages 1053
Phantom
Experimental determination of conversion factors between organ doses and measured quantities for external photon irradiation 897
Plutonium
Americium-241 content of a whole body. Part V. Implications for metabolic modelling 623
Americium-241 content of a whole body. Part IV. Preparation and analysis of the tissues and bones 587
Analysis of, in urine, rapid screening methods for 970
Deposition in Manhattan District workers: a retrospective look 1314
Fallout at Fayetteville, Arkansas 503
In autopsy tissues in Great Britain 304
Metabolism and decorporation of, after inhalation of the tributyl phosphate complex by the rat 499
Model of the systemic retention, translocation and excretion of 1115
Promotion by tetrameric catechoylamide ligands and $CaNa_3$-DTPA of the dissociation in vitro of the Pu-transferrin complex formed after intravenous injection of Pu-tri-N-butylphosphate 1302
Plutonium-238
Retention of ^{238}Pu-bearing particles by corn plants 771
Plutonium-239
Biometric estimation of chest wall thickness of females 419
In tobacco and cigarette smoke 296

Plutonium-240
In tobacco and cigarette smoke 296
Polonium-210
Comments on ^{210}Pb and ^{210}Po in the environment 1011
In tobacco and cigarette smoke 296
Polonium-214
Comments on 'A comparison of alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses' 319
Reply to comments on comparing alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses 320
Polonium-218
Comments on 'A comparison of alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses' 319
Reply to comments on comparing alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses 320
Positrons
Stopping Powers for Electrons and Positrons (ICRU Report No. 37) (book review) 1019
Potassium iodide
Predistribution or not? The real emergency preparedness issue 287
Simultaneous oral administration of, with calcium alginate, ferrihexacyanoferrate(II) and Zn-DTPA, for reducing ^{85}Sr, ^{137}Cs, ^{131}I and ^{141}Ce retention in rats 859
Power plant, coal-fired
Escaping radioactivity from coal power plants, comments regarding 1311
Escaping radioactivity from, comments regarding 1310
Power plant, Greek, gamma activity of the fly ash from, and properties of fly-ash cement 302
Power plant, nuclear
Airborne radioiodine collection, detection of ^{60}Co in charcoal cartridges used for 982
Comments on the paper 'Measurement of the effective dose equivalent in a nuclear reactor environment with a personal thermoluminescent dosimeter 315
Give KI promptly, in accidents 1311
Radioactivity in the Environment: Sources, Distribution and Surveillance by Ronald L. Kathren (book review) 115
Reactors, three light-water, carbon-14 discharge from 25
Releases from, potential contamination of surface water supplies by 713
Reply to Sutherland 316
Routine releases, dose calculations from, a new approach of influence area division 1155
Taming the Atom. Facing the Future with Nuclear Power by Ian Blair (book review) 1325
Power plant, oil-fired
Radioactivity of size fractionated fly-ash emissions from 1251
Power plant, peat-fired
Radioactivity of size fractionated fly-ash emissions from 1251
President's Message
President's Message--1985 7
Primates
Ocular effects of pulsed Nd laser radiation: variation of threshold with pulsewidth 685
Public information
A Handbook of Public Speaking for Scientists and Engineers by Peter Kenny (book review) 1318
Taming the Atom. Facing the Future with Nuclear Power by Ian Blair (book review) 1325

Quantum theory
Particles and Fields, edited by Anton Z. Capri (book review) 325

Radiation damage
Pressure build-up in sealed ampoules of radionuclides in aqueous solution, a possible hazard 977
Radiation dose
To commercial aviation crewmembers 945
Radiation therapy
Clinical health physics, evaluation of a high-resolution room temperature Si detector for use in 953
Radiation therapy (continued)
Computed Electron Beam Dose Planning (Acta Radiologica, Supplementum 36R), edited by Anders Brahme (book review) 116
Iodine-131 capsules, contamination from 81
Radiation Dosimetry: Electron Beams with Energies Between 1 and 50 MeV (ICRU Report No. 35) (book review) 1021
Radiologic Science for Technologists (3rd Edn) by Stewart C. Bushong (book review) 117
Radiation, alpha
Absorption, gastrointestinal, of Np in rats 865
Dosimeter, digital albedo neutron, use of computer memory chips as the basis for 259
Evaluation by alpha track detectors of Rn concentrations and *f* values in the natural environment 992
Particles, U alpha, in solid-state nuclear track detectors, efficiency estimation for detecting 479
Uranium-series radionuclides in a northern Saskatchewan aquatic system, food-chain transfer of 747
Ventilation, relative effect of, on the potential alpha energy from ^{222}Rn and ^{220}Rn progeny 996
Radiation, beta
Contamination of firn layers by radioactive fission products from atmospheric fallout 1173
High-resolution, room temperature Si detector for use in clinical health physics, evaluation of 953
Personnel beta dosimetry using multi-element thermoluminescent dosimeters, experimental evaluation of 55
Uranium-series radionuclides in a northern Saskatchewan aquatic system, food-chain transfer of 747
Radiation, gamma
Activity of the fly ash from a Greek power plant and properties of fly-ash cement 302
Energy and angular distribution of ^{60}Co gamma rays in air 310
Exposure rates from natural UO_2 fuel pellets, measurement of 227
Gamma-emitting radionuclides in captive meadow voles (Microtus pennsylvanicus), whole-body biological elimination rates of 1217
Moving radiation fields, doses in, aspects relating to the calculation of 1139
Nuclear radiation, enhanced, from camera lenses 491
Radioactivity level in Sn slag dumps 1008
Radiation, ionizing
Absorption of Ionizing Radiation by David W. Anderson (book review) 326
Radiation, medical
Radiological protection concept for the general population, main inconsequences in 1229

Radiation, non-ionizing
Biological Effects of Ultrasound: Mechanisms and Clinical Implications (NCRP Report No. 74) (book review) 328
Differing radiofrequency standards in the microwave region--implications for future research. Editorial. 677
Electric field, pulsed very low frequency, distribution around video display terminals 517
Electromagnetic fields, operator exposure to, and induction heating 693
"Interim guidelines on limits of human exposure to airborne ultrasound," correction for 1025
Laser, multiple wavelength, hazard analysis technique for 221
Laser, of wavelengths between 180 nm and 1 mm, international guidelines on limits of exposure to 341
Laser radiation, pulsed Nd, ocular effects of, variation of threshold with pulsewidth 685
Lasers, safety with 113
Ultraviolet, of wavelengths between 180 nm and 400 nm (incoherent optical radiation), international guidelines on limits of exposure to 331
Radiation, ultraviolet
Limits of exposure to wavelengths between 180 nm and 400 nm (incoherent optical radiation), international guidelines on 331
Radioactivity, airborne
Escaping radioactivity from coal power plants, comments regarding 1310
Retention of ^{238}Pu-bearing particles by corn plants 771
Radioactivity, environmental
Contamination of firn layers by radioactive fission products from atmospheric fallout 1173
Environmental Radioactivity (proceedings of the 19th Annual Meeting of the National Council on Radiation Protection and Measurements) (book review) 1017
Escaping radioactivity from coal power plants, comments regarding 1311
Radioactivity level, gamma, in Sn slag dumps 1008
Radioecology, suitability of transfer coefficients used for stochastic calculations in 1165
Routine releases, dose calculations from, a new approach of influence area division 1155
Radioactivity, natural
Radiation doses to commercial aviation crewmembers 945
Radioactivity in the Environment: Sources, Distribution and Surveillance by Ronald L. Kathren (book review) 115
Radiological protection concept for the general population, main inconsequences in 1229
Radon concentrations and $\underline{f}$ values in the natural environment, evaluation by alpha track detectors of 992
Risks associated with exposure to radiation: science, pseudoscience and opinion 949
Radiofrequency
Differing radiofrequency standards in the microwave region--implications for future research. Editorial. 677
Radium-226
Accumulation in trout, assessment of radiation dose to man 247
Concentration in amang 1003
Sealed ampoules of radionuclides in aqueous solution, pressure build-up in, a possible hazard 977
Uranium-series radionuclides, food-chain transfer in a northern Saskatchewan aquatic system 747

Radon
Detector, high-sensitivity, incorporating a particle generator 847
Exposures from the Uranium Series with Emphasis on Radon and Its Daughters (NCRP Report No. 77) (book review) 327
Occupational exposure to, in non-uranium mines in the European community 999

Radon daughters
Airborne ^{212}Pb and ^{220}Rn, measurements of, at varied indoor locations within the United States 1061
Comments on 'A comparison of alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses' 319
Concentration in rainwater, time variation of 1284
Concentrations measured in an energy-efficient house equipped with a heat exchanger 267
Effect of electric fields on concentration 512
Electrostatic diffusion of, dependence on environmental parameters 443
Estimates of lifetime lung cancer risks resulting from exposure 825
Evaluation of Occupational and Environmental Exposures to Radon and Radon Daughters in the United States (NCRP Report No. 78) (book review) 329
Exposures from the Uranium Series with Emphasis on Radon and Its Daughters (NCRP Report No. 77) (book review) 327
In houses, deposition rates of 1069
Levels in Pittsburgh area homes, survey of one-year averages 1053
Occupational exposure to, in non-uranium mines in the European community 999
Passive dosimeters for, application of electrets to 853
Passive electret dosimeter for, performance of 986
Radon concentrations and f values in the natural environment, evaluation by alpha track detectors of 992
Reply to comments on comparing alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses 320
Simultaneous measurement of, in cave air by liquid scintillation techniques and alpha-ray spectrometry 509
Ventilation, relative effect of, on the potential alpha energy from ^{222}Rn and ^{220}Rn progeny 996

Radon progeny
Airborne ^{212}Pb and ^{220}Rn, measurements of, at varied indoor locations within the United States 1061
Comments on 'A comparison of alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses' 319
Concentration in rainwater, time variation of 1284
Concentrations measured in an energy-efficient house equipped with a heat exchanger 267
Effect of electric fields on concentration 512
Electrostatic diffusion of, dependence on environmental parameters 443
Estimates of lifetime lung cancer risks resulting from exposure 825
Evaluation of Occupational and Environmental Exposures to Radon and Radon Daughters in the United States (NCRP Report No. 78) (book review) 329
Exposures from the Uranium Series with Emphasis on Radon and Its Daughters (NCRP Report No. 77) (book review) 327
In houses, deposition rates of 1069
Levels in Pittsburgh area homes, survey of one-year averages 1053
Occupational exposure to, in non-uranium mines in the European community 999
Passive dosimeters for, application of electrets to 853
Passive electret dosimeter for, performance of 986
Radon concentrations and f values in the natural environment, evaluation by alpha track detectors of 992
Reply to comments on comparing alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses 320

Radon progeny (continued)
Simultaneous measurement of, in cave air by liquid scintillation techniques and alpha-ray spectrometry 509
Ventilation, relative effect of, on the potential alpha energy from ^{222}Rn and ^{220}Rn progeny 996
Radon, indoor
Airborne ^{212}Pb and ^{220}Rn, measurements of, at varied indoor locations within the United States 1061
Levels in Pittsburgh area homes, survey of one-year averages 1053
Progeny in houses, deposition rates of 1069
Radon-220
Airborne, measurements of, at varied indoor locations within the United States 1061
Passive electret dosimeter for, performance of 986
Progeny concentration, effect of electric fields on 512
Ventilation, relative effect of, on the potential alpha energy from ^{222}Rn and ^{220}Rn progeny 996
Radon-222
Concentration in rainwater, time variation of 1284
Levels in Pittsburgh area homes, survey of one-year averages 1053
Passive electret dosimeter for, performance of 986
Radon concentrations and $\underline{f}$ values in the natural environment, evaluation by alpha track detectors of 992
Ventilation, relative effect of, on the potential alpha energy from ^{222}Rn and ^{220}Rn progeny 996
Radon-222, indoor
Concentrations measured in an energy-efficient house equipped with a heat exchanger 267
Measurement of summer-vs-winter variations and tightness effects in Maine houses, field and laboratory tests of etched track detectors for 65
Radon and its progeny in cave air, simultaneous measurement of, by liquid scintillation techniques and alpha-ray spectrometry 509
Reactor, boiling water
Airborne radionuclides released by a reactor accident, radiation dose due to, effects of changing dispersion conditions during long-range transport of 1239
Reactor, light-water
Carbon-14 discharge at three LWRs 25
Reference Man
Task Group on Reference Man to revise ICRP Publication 23 1015
Regulations
Differing radiofrequency standards in the microwave region--implications for future research. Editorial. 677
Remmeter, Andersson-Braun
Directional response of, in a medical accelerator treatment room 962
Repair, cellular
Irradiation, time-dependent, biological repair with 701
Respiratory system
Lung cancer risks, estimates of lifetime, from Rn progeny exposure 825
Risk analysis
Radiological protection concept for the general population, main inconsequences in 1229
Risks associated with exposure to radiation: science, pseudoscience and opinion 949
Rodents
Absorption, gastrointestinal, of Np in 865

Rodents (continued)
Calcium alginate, ferrihexacyanoferrate(II), KI and Zn-DTPA, simultaneous oral administration of, for reducing ^{85}Sr, ^{137}Cs, ^{131}I and ^{141}Ce retention in rats 859
Captive meadow voles (Microtus pennsylvanicus), gamma-emitting radionuclides in, whole-body biological elimination rates of 1217
Damage, radiation-induced, in primary cells of, using premature chromosome condensation 425
Effect of Zn-DTPA therapy on the maternal transfer of ^{241}Am or ^{237}Pu to young mice 405
Inhalation of tributyl phosphate complex by, metabolism and decorporation of Pu after 499
Removing ^{234}Th from the rat, comparison of effects of Ca-DTPA and Zn-DTPA 395

Safety standards
Criteria and Methods for Quality Assurance in Medical X-ray Diagnosis (British Journal of Radiology Supplement No. 18), edited by G. Drexler et al. (book review) 1324
Differing radiofrequency standards in the microwave region--implications for future research. Editorial 677
Lasers, safety with 113
Limits of exposure to laser radiation of wavelengths between 180 nm and 1 mm, international guidelines on 341
Limits of exposure to ultraviolet radiation of wavelengths between 180 nm and 400 nm (incoherent optical radiation), international guidelines on 331
Neutron radiation, radiobiological basis for setting 883
Ocular effects of pulsed Nd laser radiation: variation of threshold with pulsewidth 685
Radiation doses to commercial aviation crewmembers 945

Silicon
High-resolution, room temperature Si detector for use in clinical health physics, evaluation of 953

Skeleton
Americium-241 content of a whole body. Part II. Estimate of the initial systemic burden 569
Americium-241 content of a whole body. Part III. Gamma-ray measurements 577
Americium-241 content of a whole body. Part IV. Preparation and analysis of the tissues and bones 587
Systemic Pu, model of the retention, translocation and excretion of 1115

Soil
Origin of I in soil and the ^{129}I problem 279
Radionuclide partitioning coefficients in soils and plants and their correlation 106

South Africa
Abstracts of papers presented at the 24th Annual Congress of the South African Association of Physicists in Medicine and Biology--Health Physics Group, 26-28 March 1984 361

Spectrometry, alpha
Comments on 'A comparison of alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses' 319
Measurement, simultaneous, of Rn and its progeny in cave air by liquid scintillation techniques and 509
Reply to comments on comparing alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses 320

Spectroscopy, electron-spin resonance
Dose measurement following a radiation accident, use of radiation-induced, long-lived free radicals for, comments on 1313

Strontium-85
Calcium alginate, ferrihexacyanoferrate(II), KI and Zn-DTPA, simultaneous oral administration of, for reducing ^{85}Sr, ^{137}Cs, ^{131}I and ^{141}Ce retention in rats 859
Strontium-90
Radionuclides in foods, survey of, 1978-1982 731
Sulfur-35
Excretion of, from two contaminated workers 84
Survey meter
Comments on 'Correction factors for survey meter calibrations' 1309
Effect of air-scattered gamma particles on instrument and dosimeter response 435
Reply to comments on 'Correction factors for survey meter calibrations' 1309
Swine
Orally exposed, gonadal retention and localization of ^{241}Am in 1276

Taiwan
Occupational radiation exposures in, 1962-1983 411
Technetium-99
Determination of, in urine by liquid scintillation counting to evaluate internal contamination 795
Technetium-99m
Chromatography of Technetium-99m Radiopharmaceuticals--A Practical Guide by Philip J. Robbins (book review) 115
Dose calibrator linearity--a regulatory requirement 967
High-resolution, room temperature Si detector for use in clinical health physics, evaluation of 953
Thermoluminescence
Influence of regenerated on low-dose dosimetry 1193
Thorium-232
Concentration in amang 1003
Nuclear radiation, enhanced, from camera lenses 491
Thorium-234
Ca-DTPA and Zn-DTPA, comparison of for removal from the rat 395
Thyroid
Give KI promptly, in accidents 1311
Iodine-129 in mammalian, in the Federal Republic of Germany 495
Therapeutic ^{131}I capsules, contamination from 81
Thyroid weight, adult human 1097
Uptake of ^{131}I, skin exposure to I blocks 791
Tin
Radium-226 and ^{232}Th concentration in amang 1003
Slag dumps, gamma radioactivity level in 1008
Transport, environmental
Atmospheric fallout, contamination of firn layers by radioactive fission products from 1173
Bioaccumulation factors in marine organisms 1290
Contribution of inhalation by food animals to man's ingestion dose 737
Dose rate conversion factors 1015
Effects of changing dispersion conditions during long-range transport of airborne radionuclides released by a reactor accident 1239
Escaping radioactivity from coal power plants, comments regarding 1310
Escaping radioactivity from coal power plants, comments regarding 1311
Food-chain transfer of U-series radionuclides in a northern Saskatchewan aquatic system 747

Transport, environmental (continued)
Gamma-emitting radionuclides in captive meadow voles (Microtus pennsylvanicus), whole-body biological elimination rates of 1217
Nuclear waste disposal, implications for, probabilities for human intake 321
Origin of I in soil and the ^{129}I problem 279
Pathway analysis, elements from soil to human diet 239
Plutonium fallout at Fayetteville, Arkansas 503
Radioactivity of size fractionated fly-ash emissions from a peat- and oil-fired power plant 1251
Radioecology, suitability of transfer coefficients used for stochastic calculations in 1165
Radionuclide partitioning coefficients in soils and plants and their correlation 106
Radionuclides in foods, survey of, 1978-1982 731
Radium accumulation in trout with assessment of radiation dose to man 247
Radon-222 concentration in rainwater, time variation of 1284
Routine releases, dose calculations from, a new approach of influence area division 1155
Solubility of radionuclides in ash from the incineration of animals 1270
Transfer of ^{137}Cs and ^{60}Co in a waste retention pond with emphasis on aquatic insects 777
Transport, biotic, of radionuclides from a low-level radioactive waste site 11
Uranium cargo, hazards from sinking of ships with 318

Tritium
Contamination of firn layers by radioactive fission products from atmospheric fallout 1173
Effects of Prenatal Irradiation with Special Emphasis on Late Effects. Proceedings of a Symposium of the European Late Effects Project Group at Bordeaux, France, 29 July 1982, edited by C. Streffer and G. Patrick (book review) 330
Intakes as a fraction of the annual limit of intake, unique method of determination 1261
"Models of tritium excretion following prolonged occupational exposure," correction for 1027
Radionuclides in foods, survey of, 1978-1982 731

U.S. Transuranium Registry
Americium-241 content of a whole body. Part I. Introduction and history of the case 565
Americium-241 content of a whole body. Part II. Estimate of the initial systemic burden 569
Americium-241 content of a whole body. Part III. Gamma-ray measurements 577
Americium-241 content of a whole body. Part IV. Preparation and analysis of the tissues and bones 587
Americium-241 content of a whole body. Part V. Implications for metabolic modelling 623
Plutonium deposition in Manhattan District workers: a retrospective look 1314

Ultrasound
Biological Effects of Ultrasound: Mechanisms and Clinical Implications (NCRP Report No. 74) (book review) 328
"Interim guidelines on limits of human exposure to airborne ultrasound," correction for 1025

United Kingdom
Plutonium in autopsy tissues in 304

Uptake
Analysis of Pu or Am in urine, rapid screening methods for 970
Give KI promptly, in accidents 1311

Uptake, plant
Radionuclide partitioning coefficients in soils and plants and their correlation 106
Transport of elements from soil to human diet: an alternative approach to pathway analysis 239
Uranium
Alpha particles in solid-state nuclear track detectors, efficiency estimation for detecting 479
Cargo, hazards from sinking of ships with 318
Exposures from the Uranium Series with Emphasis on Radon and Its Daughters (NCRP Report No. 77) (book review) 327
Uranium dioxide fuel pellets, measurement of gamma radiation exposure rates from natural 227
Uranium-series radionuclides, food-chain transfer in a northern Saskatchewan aquatic system 747
Uranium dioxide
Natural UO_2 fuel pellets, measurement of gamma radiation exposure rates from 227
Uranium mines
Comments on 'A comparison of alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses' 319
Field study of Ra accumulation in trout, assessment of radiation dose to man 247
Reply to comments on comparing alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses 320
Ventilation, relative effect of, on the potential alpha energy from ^{222}Rn and ^{220}Rn progeny 996

Ventilation
Relative effect of, on the potential alpha energy from ^{222}Rn and ^{220}Rn progeny 996
Video display terminal
Distribution of a pulsed very low frequency electric field around 517

Waste disposal
Incineration of animals, solubility of radionuclides in ash from 1270
Laboratory-generated liquid radioactive waste, disposal of 324
Nuclear, implications for, probabilities for human intake 321
Tin slag dumps, gamma radioactivity level in 1008
Transfer of ^{137}Cs and ^{60}Co in a waste retention pond with emphasis on aquatic insects 777
Waste site, biotic transport of low-level radioactive radionuclides from a 11
Waste, low-level
Laboratory-generated liquid radioactive waste, disposal of 324
Water
Contamination of firn layers by radioactive fission products from atmospheric fallout 1173
Contamination of surface supplies by atmospheric releases from nuclear plants 713
Water, salt
Marine organisms, bioaccumulation factors in 1290
Weapons
Contamination of firn layers by radioactive fission products from atmospheric fallout 1173

Whole-body counting
Americium-241 content of a whole body. Part III. Gamma-ray measurements 577
Biometric estimation of chest wall thickness of females 419
In-vivo measurements, new method for analyzing high-resolution spectra from 1085
Whole-body biological elimination rates of gamma-emitting radionuclides in captive meadow voles (Microtus pennsylvanicus) 1217
Working levels
Comments on 'A comparison of alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses' 319
Reply to comments on comparing alpha spectroscopy and gross alpha techniques for determining working level in uranium mines and houses 320

x rays
Conventional and rare-earth screen/film systems, comparison of exposures between 958
x-ray examination
Basic Principles of Computed Tomography by Carlisle Lee Morgan (book review) 1019
Conventional and rare-earth screen/film systems, comparison of exposures between 958
Criteria and Methods for Quality Assurance in Medical X-ray Diagnosis (British Journal of Radiology Supplement No. 18), edited by G. Drexler et al. (book review) 1324
Population doses, excess deaths and loss of life expectancy from mass chest, in Japan--1980 37
Quality Control in Diagnostic Imaging. A Quality Control Cookbook by Joel E. Gray et al. (book review) 327
Radiodiagnostic pediatric department, evaluation of dose absorbed by personnel or parents accompanying children in 1295
Radiographs, portable, pattern of scattered exposure from 92
Xenon-133
Dosimetry of external radiation exposure for and calculation of maximum permissible concentration values for airborne materials containing 805

Zn-DTPA
Chelation therapy using, effect on maternal transfer of ^{241}Am or ^{237}Pu to young mice 405
Comparison with Ca-DTPA, in removing ^{234}Th from the rat 395
Simultaneous oral administration of, with calcium alginate, ferrihexacyanoferrate(II) and KI, for reducing ^{85}Sr, ^{137}Cs, ^{131}I and ^{141}Ce retention in rats 859